

Prospect Boulevard Bridge
Prospect Boulevard spanning Seco Street
Pasadena
Los Angeles County
California

HAER No. CA-23

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19-PASA
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Western Regional Office
National Park Service
Department of the Interior
San Francisco, California 94102

HISTORIC AMERICAN ENGINEERING RECORD

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Prospect Boulevard Bridge

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Location: Spans Seco Street in the Arroyo Section of western Pasadena
Pasadena, Los Angeles County, California

Date of Construction: 1908

Engineer: The firm of Mayberry and Park of Los Angeles

Original Use: Vehicular traffic

Present Use: Pedestrian traffic

Present Owner: City of Pasadena

Significance: The Prospect Boulevard Bridge is the visual link between the neighborhoods of Prospect Park and Arroyo Park. It maintains a suburban scale due to its narrow width, the thinness of its pier supports and the curve of the roadway. It is an example of the early use of reinforced concrete in viaduct construction in southern California. Because the surface of the bridge has been so altered, its primary significance lies in its compatibility to the surrounding historic residential districts in terms of its scale. At the time of its construction, it was the only one of its type built on such a curve.

Historian: Melvyn Green and Associates, Inc., May 1984

Transmitted and
Edited by: Jean P. Yearby, HAER, 1985

DEVELOPMENT OF THE SITE

The successful spanning of the canyon known as the Arroyo Seco had tremendous impact on the development of Pasadena. The community was able to expand westward and annex adjacent areas on the western rim. The first bridges were trestle bridges (built in the late 1880s). These were replaced very soon with more substantial wood steel and then with reinforced edifices. Construction of such bridges eliminated natural barriers and enabled the San Rafael and Linda Vista areas to become annexed to the city of Pasadena. During the early years of the development of Pasadena (the city was established in 1874), the Arroyo was ignored or was looked upon as an unfortunate natural barrier which separated the community from Los Angeles and the land to the west. By the turn of the century, the Arroyo had emerged as a highly romantic element in the California landscape; it became a positive feature which was either to be left as is or mildly transformed into parks and recreational areas. The Prospect Boulevard Bridge, situated on the upper Arroyo, provided the conduit to newer suburbs like Arroyo Park. The role of the bridge was residential in character. Its importance was increased when a school was built north of the Arroyo, when the Rose Bowl was completed in 1922, and when further improvements were made within Brookside Park.

One of the great assets of the Arroyo, which was seized upon first by the turn-of-the-century Arts and Crafts exponents and later by the Spanish Colonial Revivalists of the late 1910s and 1920s, was that it provided a wilderness upon which houses the middle and upper-middle class could gaze. The irregularity of the terrain which bordered the Arroyo easily lent itself to the romantic irregular pattern of streets which became the hallmark of upper-middle class suburbia throughout the United States. Prospect Boulevard, with its bridge over Seco Street, formed one of the principal local arteries within the upper Arroyo district of Pasadena. The bridge itself was built so that those who would build single-family residences on the east side of the Arroyo, north of Seco Street, would be able to commute to the center of Pasadena on Colorado Boulevard to the south. The boulevard and bridge were built by the Arroyo Park Corporation in anticipation of the residential development of both the southern and northern portions of this section of the North Arroyo district. The southern section adjacent to Prospect Boulevard was officially plotted in 1906, and the section north of the bridge was plotted in 1910. The southern section was subdivided by the Prospect Park Realty Company; the northern section, where Prospect Boulevard was named Armada, was land owned by the San Pasqual Land Association.

The development of the Prospect Park neighborhood, an upper-middle class neighborhood south of the bridge, began in 1904 with the purchase of the 32-acre Cooly Tract by prominent Pasadena businessmen J. C. Brainerd, Nyles Eaton, and John C. Bentz. The subdivision was comprised of 64 spacious lots laid out along wide curving streets. The curve of Prospect Boulevard reflected the curve of an adjacent railroad spur; however, the placement of the streets and lot sites conveyed the feeling that this was a natural integrity of the site. Prospect Park became one of the city's most fashionable areas. Prominent citizens hired important local architects.

Charles and Henry Greene, the Heineman brothers, Frank Lloyd Wright, F. L. Roehrig, Wallace Neff, Roland Coate, and Myron Hunt are all represented. The Prospect Park district is recognized for its unique design and landscaping, its diversity of fine architectural examples of Craftsman and period revival residences and its association with prominent architects and master builders. It is listed on the National Register of Historic Places.

To the north of the site lies Arroyo Park, a 1910 subdivision which sought to employ the same elements of design and quality exemplified by Prospect Park. A 1913 promotional brochure details its connection to its prestigious neighbor by means of "a concrete bridge" (Prospect Boulevard Bridge). Generous lots, mature landscaping, and curving streets were employed in this area as well. These features, combined with examples of varied architectural styles executed with quality, unify the two districts. Arroyo Park is also listed on the National Register of Historic Places.

Among the major architectural monuments located close to Prospect Boulevard and its bridge are:

"LA MINATURA" (1923)
645 Prospect Crescent
Frank Lloyd Wright; Studio by Lloyd Wright

GAMBLE HOUSE (1908)
4 West Morland Place
Charles and Henry Greene

IRWIN HOUSE (1900, 1906)
240 N. Grand
Charles and Henry Greene

HUNT HOUSE (1907)
200 N. Grand
Myron Hunt

FENYES HOUSE (1910)
499 Prospect Terrace
Robert Farquhar

MCMURRAN HOUSE (1911)
499 Prospect Terrace
Fred L. Roehrig

HINDRY HOUSE (1909)
781 Prospect Boulevard
Arthur and Alfred Heineman

BENTZ HOUSE (1906)
657 Prospect Boulevard
Charles and Henry Greene

GREENE HOUSE (1901)
368 Arroyo Terrace
Charles and Henry Greene

WHITE SISTERS HOUSE (1903)
370 Arroyo Terrace
Charles and Henry Greene

PRESENT USE/INTENDED USE

The bridge was closed to vehicular traffic in 1977, when serious cracks were found in the supports. Pedestrian use continues. It has been judged that continued deterioration with the passage of time would further erode the structure's capability to bear its own weight. Removal of the bridge is considered to be necessary for public safety. A December 1976 report from Caltrans indicates that repair of the existing structure is not practical. Projected date of demolition was June 1984.

ARCHITECTURAL INFORMATION

The bridge is an eleven span reinforced concrete "T" beam structure which passes forty feet over Seco Street. It serves as the link between two historically significant Pasadena neighborhoods, Prospect Park and Tract #1032 (Arroyo Park). It is 362.5 feet long and 27 feet wide. Its structure is that of a simple post and beam configuration with vertical and horizontal members tied together by steel reinforcing. The vertical supports are composed of two column bents joined together at intervals by horizontal struts. The curved roadway is supported longitudinally by two main beams. Small outriggers extend transversely outward to support the sidewalks, and paired stringers parallel to the main longitudinal beams provide intermediate support for the concrete deck. The reinforced concrete roadway lies directly upon the longitudinal beams and the rows of paired stringers. The deck system of the structure utilizes a "T" beam concept, whereas the deck slab girders and stringers are cast in an integral manner, all working together. The structure is cast integrally, or in a continuous fashion longitudinally, except for one expansion joint. It is supported by spread footings on native ground. The 27-foot-wide roadway and its adjacent walks provide a gentle curve which turns the boulevard from a northeast to a more northerly direction.

At the northerly abutment, 70 to 80 foot long concrete wing walls are used to retain the roadway and provide transition from the bridge to the hillside roadway. The "S" curve effect is actually created by the wing walls at the northerly abutment.

The thinness of the members minimizes the bridge's impact on the Arroyo, and the adjoining trees and shrubs hide substantial parts of the structure. Its suburban scale is maintained by its narrow width, the gentle curve of its roadway, the scale of its pier supports, and the height and detailing of its original railing and light standards. On the street grade, one is not really aware of its length, nor of its 40-foot height above the Arroyo. From the Arroyo below, the bridge and its vertical supports do not impinge on the park and its surroundings. The bridge is unobstrusive and fits very gently into both the park and to its adjoining suburban areas.

The bridge represents an amalgamation of a concrete girder and slab system of construction. This mode of structure "was introduced into American bridge building by F. W. Patterson of Pittsburgh in 1898" (Condit, 1961, p. 207). By the early 1900s, variations of this system of construction were used throughout the United States.

A support trestle was added to the structure in 1928 and subsequently removed. The original sidewalk and railing were removed and replaced with new railing and sidewalk in 1961. Arc light replaced the original single bulb design in 1966.

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